

# THE NAUTILUS

Vol. 64

JANUARY, 1951

No. 3

## INTERESTING SHELLS FROM THE DELMARVA PENINSULA

BY BERNADINE BARKER BAKER

During the latter half of June 1950, my husband and I spent a combined vacation and collecting trip at Accomac, Virginia, on the Delmarva Peninsula. The peninsula, as its name suggests, is made up of parts of the States of Delaware, Maryland, and Virginia, and forms the outer boundary of Chesapeake Bay. The area in Virginia where all collecting was done is Pleistocene sand, about half covered with pine barrens, with the remainder used for farming. At the time we were there, early potatoes were being harvested as well as snap beans. Tomatoes, and sweet potatoes were also noted in quantity. Besides agriculture, the peninsula is widely known as a fishing, crabbing, and oyster center. Of course we were mainly interested in the latter, and we made some of our most interesting finds from the heaps of discarded oyster shells. Considering that we were warned beforehand and told repeatedly that there were no shells to be found thereabouts, we found our trip singularly rewarding. At the close of this paper is a list of the mollusks noted in the various collecting spots.

(1). FOLLY CREEK, ACCOMAC. "Creek" is the term locally used for any long narrow arm of the sea or bay. These are affected by the tides, and may be somewhat brackish. At the branch of Folly Creek which we visited, we found a great number of oyster discards. Near by in three bushel baskets were very nicely collected for us the largest examples of *Urosalpinx cinereus* we had ever seen. The majority were from  $1\frac{3}{4}$  inches to 2 inches high; the largest one (Pl. 5, fig. 4) being 51.2 mm. high by 24.1 mm. greatest diameter. They surely must have had optimum growing conditions. We also found some large *Eupleura caudata* shells, but these were relatively scarce here. Col-

lecting along the creek bank in the mud we pulled up very large *Modiolus demissus plicatulus*, the largest over 115.5 mm. greatest measurement (over  $4\frac{1}{2}$  inches). Very large *Littorina irrorata* were also picked up, the largest measuring 29.2 mm. (over  $1\frac{1}{8}$  inches), with major diameter 19.1 mm.

(2). ONANCOCK CREEK, ONANCOCK. On the bay side, this creek showed marked differences from the previous locality. We collected at two different places here: Finney's Wharf and East Point. The latter is a swimming spot, with sandy bottom, and has been somewhat disturbed by the dredging of a channel so that boats may come in to the wharf. *Tagelus gibbus* was noted here in great quantity. *Littorina irrorata* was markedly smaller than the specimens collected in Folly Creek. Among the small mollusks crawling on the bottom, we noted young *Ilyanassa obsoleta*. Unlike the adults, these have a complete spire. Deep Creek, where large specimens of *Mytilus recurvus* were found with the oyster discards, was similar to Onancock Creek.

(3). KIPTOPEKE BEACH, NEAR CAPE CHARLES. This long stretch of sandy beach along Chesapeake Bay near the tip of the peninsula yielded one of the most interesting finds of the entire trip. A half mile out in the water we noted trap nets, and as we came opposite these on the beach, we found many specimens of *Busycon carica*. They were unusual for two reasons: their bright orange lining, and their retention of entire epidermis. All specimens were very fresh, most of them having parts of the animal and the operculum. Obviously they had been discarded by the fishermen as unworthy of notice. The largest of these measures  $9\frac{13}{16}$  inches long. In addition to the *Busycon*, we picked up one fine specimen of *Dosinia discus*. To complete this wonderful "catch," a half-bushel basket was found conveniently near, with some discarded rope to make a handle!

(4). CEDAR ISLAND, ON METOMPKIN INLET, ACCOMAC COUNTY. A group of five interested "shellers" hired a motorboat with owner for the trip to this outer island, which had only a Coast Guard Station and one house on it. The beach here looked more like the beaches of Florida's west coast—wave-rows of shells at the water line. Practically the only live material obtained were the two species of *Busycon*. *B. carica* was the more common, with many dead ones high up on the beach. A large lobster or

crab pot was filled with these for use as decoration around a garden. Of the live specimens collected, the largest measured 9 inches long. The dead shells on the shore contained some species not previously reported from so far north; namely, *Chione cancellata*, *Pecten gibbus*, and *Mulinia lateralis corbuloides*. The chiones were large; the largest measuring 39.7 mm. long ( $1\frac{9}{16}$  in.), and 35.8 mm. high.

(5). BIRCHTOWN, AND ASSATEAGUE ISLAND, NEAR CHINCOTEAGUE. Assateague Island is a U. S. Wildlife Refuge, and we were interested to see what the molluscan fauna might be. A short trip via rowboat across Assateague channel from Birchtown, a small settlement out of Chincoteague, brought us there at low tide. We were much disappointed at the collecting on the channel side of the island, and because of the faintheartedness of the author, did not brave the mosquitoes and swampland to cross to the outer side. However, it probably would not have been markedly different from that found at Cedar Island. The one rewarding thing about this trip was a glimpse of the famous wild horses, of which we saw a half dozen or so when they came down to the shore. Bird life was abundant, and we wished we had had more time to study it. On our return to Birchtown, among the great piles of the famous Chincoteague *Ostrea virginica*, we found some very large *Eupleura caudata caudata* Say. The largest of these (Pl. 5, fig. 5) measures 41.6 mm. high (over  $1\frac{5}{8}$  inches) by 21.5 mm. major diameter. We also found very large fresh specimens of *Busycon canaliculatum*, the largest measuring  $7\frac{15}{16}$  inches long,  $4\frac{7}{8}$  inches largest diameter. These were fresh, with operculum and animal. Here, too, we found the only chiton of our trip. *Noetia ponderosa* and *Arca c. pexata* were common amongst all the discarded oyster shells here as in other localities. The largest *A. pexata* found measures 64.3 mm. (over  $2\frac{1}{2}$  inches) in length, 52.4 mm. altitude, 39.5 mm. diameter.

UROSALPINX CINEREUS Say, var. FOLLYENSIS, new form. Plate 5, fig. 4.<sup>1</sup>

The differentiating characteristic of this form is its larger size due to an added whorl, making 8 plus whorls. The variety is named for the type locality, Folly Creek, Accomac, Virginia.

<sup>1</sup> Nomenclatorial subspecies.

The type measures: 51.2 mm. long, 24.1 mm. wide. Type ANSP. 186817; paratypes lot No. 992, author's collection.

EUPLEURA CAUDATA Say, var. ETTERAE, new form. Plate 5, fig. 5.<sup>1</sup>

This form is also characterized by an added whorl and its larger size. It was found both at Folly Creek and Birchtown, the type and the greatest number being taken at the latter spot. It is named for Mrs. Robert Etter of Onancock, Virginia. Type locality: Birchtown, Chincoteague, Virginia. The type measures: 41.6 mm. high by 21.5 mm. wide. Type ANSP 186818; paratypes include lot No. 991, author's collection.

#### LIST OF SHELLS FROM THE DELMARVA PENNINSULA

Numbers following specific names refer to the localities in the numbered paragraphs preceding, and indicate that the species was found at those places only. Species not numbered were found pretty generally in all the spots visited.

<i>Chaetopleura apiculata</i> 5	<i>Ensis directus</i> 3, 4
<i>Nucula proxima</i> 4	<i>Spissula solidissima</i> 3, 4
<i>Arca campechiensis</i> 4	<i>Mulinia lateralis</i>
<i>A. campechiensis pexata</i>	<i>M. lateralis corbuloides</i> 4
<i>A. transversa</i> 4	<i>Anatina canaliculata</i> 4
<i>Noetia ponderosa</i>	<i>Mya arenaria</i> 2, 3
<i>Ostrea virginica</i>	<i>Barnea truncata</i> 4
<i>Pecten irradians</i>	<i>B. costata</i> 4
<i>P. gibbus</i> 4	<i>Diadora alternata</i> 4
<i>Anomia simplex</i>	<i>Epitonium angulatum</i> 4
<i>Mytilus edulis</i> 3, 4	<i>E. multistriatum</i> 4
<i>M. recurvus</i> —Deep Creek	<i>Melanella conoidea</i> <sup>2</sup> 4
<i>Modiolus demissus plicatulus</i>	<i>Polinices duplicata</i>
<i>Astarte castanea</i> 3	<i>P. heros</i> 3
<i>A. undata</i> 4	<i>P. triseriata</i> 4
<i>Laevicardium mortoni</i> 2	<i>Sinum perspectivum</i> 4
<i>Dosinia discus</i> 3	<i>Crepidula fornicata</i>
<i>Chione cancellata</i> 4	<i>C. glauca convexa</i>
<i>Venus mercenaria</i>	<i>C. plana</i>
<i>V. mercenaria notata</i>	<i>Littorina irrorata</i>
<i>V. mercenaria alba</i> 4	<i>Eupleura caudata</i>
<i>Petricola pholadiformis</i> 3, 4	<i>Urosalpinx cinereus</i>
<i>Tellina tenera</i> 2	<i>Anachis avara</i> 2, 4
<i>Macoma balthica</i> 2	<i>Mitrella lunata</i> 4
<i>Donax fossor</i> 3, 4	<i>Ilyanassa obsoleta</i>
<i>Tagelus gibbus</i>	<i>Nassarius trivittatus</i>

<sup>2</sup> Reported by Mrs. Ernestine Taylor.

<i>N. vibex</i>	<i>Melampus lineatus</i> 1
<i>Busycon carica</i>	<i>Marginella apicina borealis</i> 4
<i>B. canaliculatum</i>	<i>Terebra dislocata</i> 4
<i>Mangilia plicosa</i> 2	

---

## A CLARIFICATION OF SOME CENTRAL AMERICAN UNIONIDAE DESCRIBED BY R. A. PHILIPPI

BY RICHARD I. JOHNSON

R. A. Philippi described a number of new shells in the *Zeitschrift für Malakozoologie* during 1848 and 1849. Unfortunately most of the descriptions were mere sketches unaccompanied by figures. In this paper we have sought to clarify some of the Unionidae which have been carried in the literature for 100 years as *nomina dubia*. For two of the species we have type material. Some may take exception as to the status of this material because Philippi based each of his descriptions on one immature specimen selected from each lot by Largilliert which the latter sent to Philippi for description. As the specimens described are unavailable, we have thought it desirable to fix the names on this material which Largilliert kept and distributed, and which is as "authentic" as any we can ever hope to have. We have also united two of Philippi's names after the study of a more adequate series than was available to him.

I wish to thank J. P. E. Morrison and R. H. Rehder of the United States National Museum for suggestions and the loan of valuable type material; H. A. Vander Schalie for material from the Zoology Museum of the University of Michigan; G. Ranson of the Paris Museum for allowing me to look for Morlet's types; and W. J. Clench for his ever willing aid and council.

### LEPTODEA LARGILLIERTI (Philippi) Plate, 5, fig. 2.

*Unio largillierti* Philippi, 1847, *Zeit. für Mal.*, 4, p. 94 (Yucatan [Prov., Mexico]); von Martens, 1900, *Biol. Central America, Moll.*, p. 94 [*nomen dubia*].

*Lampsilis largillierti* Philippi, Simpson 1914, *Des. Cat. Naiades*, Detroit, Michigan, 1, p. 194 [*nomen dubia*].

*Unio paludosus* Morlet, 1849, *Test. Noviss. Cubanae et Americae Centralis*, 1, p. 30 (swamps near San Geromino, Yucatan [now Campeche, Mexico]); Fischer & Crosse, 1894, *Miss. Sci. Mexique*, Part 7, 2, p. 559, pl. 59, fig. 3.